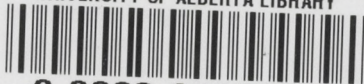


UNIVERSITY OF ALBERTA LIBRARY



0 0003 8197 687

R 26-159

Annual Report of the

EASTERN ROCKIES FOREST CONSERVATION BOARD

Fiscal Year

1958~59

UNIVERSITY OF ALBERTA

NOV 4 1959

DOCUMENTS
LIBRARY

GENERAL SCIENCES

SD

414

C2E116

1958/59

Calgary, Alberta, March 31st, 1959.

Ex LIBRIS
UNIVERSITATIS
ALBERTAENSIS



ANNUAL REPORT

of the

EASTERN ROCKIES FOREST CONSERVATION BOARD

for the

FISCAL YEAR

1958-59

Calgary, Alberta

March 31st, 1959.

LIBRARY
UNIVERSITY OF ALBERTA

EASTERN ROCKIES FOREST CONSERVATION BOARD

Calgary, Alberta
June 30th, 1959

The Honourable Norman Willmore,
Minister of Lands and Forests,
Edmonton, Alberta.

Sir:

I have the honour to submit herewith the Annual Report of the Eastern Rockies Forest Conservation Board for the fiscal period April 1st, 1958 - March 31st, 1959, pursuant to the provisions of the Eastern Rocky Mountain Forest Conservation Act of 1947. I am

Your obedient servant,

H. G. Jensen,
Acting Chairman.

2299454

EASTERN ROCKIES FOREST CONSERVATION BOARD

Calgary, Alberta.
June 30th, 1959.

The Honourable Alvin Hamilton,
Minister of Northern Affairs
and National Resources,
Ottawa, Ontario.

Sir:

I have the honour to submit herewith the Annual Report of the Eastern Rockies Forest Conservation Board for the fiscal period April 1st, 1958 - March 31st, 1959, pursuant to the provisions of the Eastern Rocky Mountain Forest Conservation Act of 1947. I am

Your obedient servant,

H. G. Jensen,
Acting Chairman.

TABLE OF CONTENTS

	<u>Page</u>
PRINCIPAL OFFICERS	1
REPORT OF BOARD MEMBERS	2
FOREST PROTECTION	4
FOREST OPERATIONS	11
FOREST AND RANGE MANAGEMENT	26
ADMINISTRATION AND MAINTENANCE	36
REPORT OF THE SECRETARY	45
FINANCIAL STATEMENT	49

* * * * *

PRINCIPAL OFFICERS

Eastern Rockies Forest Conservation Board

Chairman and Federal Member -

Howard Kennedy, C.B.E., M.C., B.Sc.

Alberta Members

A. T. Baker, B.A.

H. G. Jensen, LL.B.

* * * * *

ADMINISTRATION

Administrative Officer

S. R. Hughes

Secretary

J. M. Marshall

Chief Forester

W. R. Hanson

Protection Planning Officer

P. L. Brooks

Superintendent

Crowsnest Forest

J. F. Hogan

Superintendent

Bow River Forest

F. V. Keats

Superintendent

Clearwater Forest

R. G. Steele

* * * * *

REPORT OF THE BOARD

This is the twelfth Annual Report of the Board and deals with activities on the Rocky Mountains Forest Reserve during the fiscal year ending March 31st, 1959.

A revision was made of ranger districts in the Clearwater Forest. The former Saskatchewan district (3,067 square miles) was considered too large for efficient administration and was divided into two parts designated as the Saskatchewan and Upper Saskatchewan districts. Similar action was taken in connection with the Clearwater district (973 square miles) which was divided into two parts known as the Clearwater and Prairie Creek districts.

The year was very satisfactory in many respects. There were no forest fires of large proportions, no destructive floods and no serious outbreaks of forest diseases. Furthermore, it was a good year in which to carry out physical improvements in the maintenance of bridges, roads, buildings, and lookouts so that these were kept up to standard. In addition, some new construction was carried out. More information is given on these improvements in the body of this report.

Commercial activities in the harvesting of timber and the grazing of cattle show a slight expansion over the previous year.

In the search for gas and oil, geophysical explorations are somewhat reduced but drilling of wildcat wells has increased.

The recreational use of the area continues to expand and has necessitated additional facilities at established camp sites and the establishment of new ones.

Watershed conditions have been satisfactory. The streams are generally very clear except for a short period in the spring when some are carrying a sediment load.

It is with regret that the Board reports the resignation of Major-General Howard Kennedy as Federal member, with effect from March 31st, 1959. This action followed his appointment as Chairman of the National Capital Commission in Ottawa. General Kennedy was one of the original Federal members and was appointed by the Federal Government as Chairman of the Board on its establishment in 1947. It may be considered as a tribute to his capabilities that when the right to appoint the Chairman passed to the Province through an amendment to the Act, the Alberta Government requested him to continue as Chairman, as from April 1st, 1955. Under his direction, the physical improvements in bridges, roads, buildings, lookouts, and radio communication were established and an efficient, well-equipped fire-fighting organization built up.

Mr. H.G. Jensen, one of the original Provincial members of the Board, was appointed by the Province as Acting Chairman.

Mr. G. Tunstell, a former member of the Board was appointed by the Federal Government as their representative.

H.G. Jensen, Acting Chairman,
A.T. Baker, Alberta Member,
G. Tunstell, Federal Member.

FOREST PROTECTION

FOREST FIRE PROTECTION

In the spring of 1958 the snow-melt was rapid and little rain fell during the month of May. As a result a serious spring fire-danger occurred in all three forests. The danger was alleviated by general rains on May 30th. Scattered showers occurred during July and August keeping the fire danger to low and medium. Lack of moisture during the fall caused an extreme fire-danger throughout the Rocky Mountains Forest Reserve. Due to the tinder-dry condition most of the Reserve was closed to public travel for 23 days. Snow in the second week of November ended the 1958 fire season.

Twelve weather stations submitted daily weather reports and Fire Danger Index calculations through the fire season, May 1st to November 13th.

During the fire season, 28 fires were acted upon by Forest Reserve personnel; 20 of the fires being within the Reserve and eight on adjacent areas. The distribution of the fires was as follows:

	<u>Inside Reserve</u>	<u>Outside Reserve</u>	<u>Total</u>
Clearwater Forest	5	-	5
Bow River Forest	3	8	11
Crowsnest Forest	12	-	12
	<hr/>	<hr/>	<hr/>
	20	8	28
	<hr/>	<hr/>	<hr/>

Fires by Causes

<u>Cause</u>	<u>Inside Forest Reserve</u>	<u>Adjacent to Forest Reserve</u>	<u>Total Fires</u>	<u>Total %</u>
Settlers	-	6	6	21.5
Campers	5	-	5	17.9
Lightning	4	-	4	14.3
Smokers	3	1	4	14.3
Industrial	3	1	4	14.3
Railway	2	-	2	7.2
Unclassified	3	-	3	10.5
	<hr/>	<hr/>	<hr/>	<hr/>
	20	8	28	100.0
	<hr/>	<hr/>	<hr/>	<hr/>

Fires by Classification

<u>Classification</u>	<u>Number</u>	<u>Per Cent</u>
A (Less than 1/4 acre)	19	67.86
B (1/4 acre to 10 acres)	6	21.43
C (10 acres to 100 acres)	2	7.14
D (over 500 acres)	1	3.57
	<hr/>	<hr/>
	28	100.00
	<hr/>	<hr/>

A total of 3,745 acres of timber, young growth and grassland was burned at a total cost of \$65,686.53, exclusive of the cost of forest service equipment and personnel.

One fire in the Clearwater Forest, believed started from a neglected hunter's campfire during extreme fire danger cost \$63,439.00 to extinguish. Ninety-seven per cent of all fire-fighting costs for the year were

attributed to this one unextinguished campfire.

The same fire destroyed three million board feet of merchantable timber. Manpower, bulldozers and spray aircraft all aided in extinguishing the fire.

At present, sixteen lookouts within the Forest Reserve report on smokes and fires.

Two new ranger districts were established in the Clearwater Forest during the year in order to improve fire protection efficiency.

The two districts will be called Upper Saskatchewan and Prairie Creek. A new ranger station establishment was built on the Upper Saskatchewan district.

Throughout the fire season, Forest Conservation and Fire Prevention publicity was dispensed through radio, television and press.

Television stations presented several showings of films, radio stations broadcast a number of fire-warning messages, and newspapers printed articles on conservation and fire prevention as a public service. A number of paid announcements were also released during the season. In addition, many press releases were given out to all three media.

Speeches were given and films were shown at several business and school meetings in towns throughout southwestern Alberta.

The Canadian Forestry Association also carried out an extensive travelling program showing films and giving speeches on forest-fire prevention at schools and community centres.

BIOLOGICAL PROTECTION

Personnel of the Forest Insect and Disease Survey of the Forest Biology Laboratory at Calgary have continued to keep the Forest Reserve under constant observation. No significant change in the situation with regard to tree diseases in the forest conservation area was reported last year.

FOREST Atropellis canker disease of Pine.
PATHOLOGY (Atropellis piniphila) was reported to be
 widespread on lodgepole pine in the foot-
hills of Alberta but no new areas having a high incidence
of the disease were noted during 1958.

Needle Cast of Lodgepole Pine. The needle
cast disease of lodgepole pine (Hypodermella montivaga)
reported in outbreak proportions in Banff and Jasper Nat-
ional Parks in 1955-57 was not reported from these areas
in 1958. A small outbreak of the same disease reported
in 1957 for the Dutch Creek area of the Crowsnest Forest
showed a reduced amount of damage on re-examination in
1958.

Blister Rust on Limber Pine. White pine
blister rust (Cronartium ribicola) was observed on limber
pine in Waterton Lakes National Parks for the first time in
1958. Twig, branch and stem cankers were noted on about
75 per cent of the pines in a mixed forest of Engelmann
spruce, alpine fir and limber pine. The affected area
totalled about 1,700 acres.

Clumping of Aspen Foliage. The curious
clumping of foliage at the ends of trembling aspen branches,
which is very prevalent in the Alberta foothills in some
years, is probably due to late frost injury.

Flagging of Lodgepole Pine. A high incidence of flagging in young stands of open-grown lodge-pole pine was observed at several points along the Coleman-Kananaskis Trunk Road in 1958. Explanation of the flagging condition revealed a close association with what appeared to be squirrel damage to cone-bearing branches.

Winter Injury of Pine. A re-examination was made of stands in the Kananaskis Valley that were known to have sustained "red-belt" damage in 1956 and 1957. A slight decrease in diameter growth was indicated on the basis of increment core examination, presumably due to the loss of 1956 and 1957 foliage, but no permanent damage was noted. The growth rate of these stands is expected to recover as the trees regain their normal amount of foliage.

FOREST ENTOMOLOGY There was little serious damage caused to the forests of the Eastern Rockies by insects in 1958. Poplar insects were numerous and caused extensive defoliation; no tree mortality is expected as a result of their feeding unless the outbreak is unusually prolonged or complicated by other factors. Except for the small outbreaks of yellow-headed spruce sawfly and pine needle scale in the Crowsnest Forest there was little insect activity on coniferous trees. A summary of insect conditions is given below.

Larch sawfly (*Pristiphora erichsonii*-Htg.)
A large area of light defoliation was present in tamarack swamps along the eastern slopes of the Rockies from a few miles south of the Red Deer River to beyond the Little Smoky.

A light infestation of larch sawfly occurred on planted larch at the Kananaskis Experiment Station. This is the most southerly infestation in the forested area of Alberta and is about 50 miles beyond the southern extension of tamarack.

Forest tent caterpillar (Malacosoma disstria-Hbn.) Egg clusters and pupal cases of the forest tent caterpillar were evident in the fall of 1958 along the aspen grove area of the eastern slopes and in the Porcupine Hills. This area extended from the United States border to Stavelly.

Bruce spanworm (Operophtera bruceata-Hulst.) The Bruce spanworm was present throughout the aspen stands in the southern two-thirds of the Province. Severe defoliation occurred in the aspen zone of the eastern slopes from the Oldman River north to Sundre, from the junction of the Scab and Ram Rivers north to the Brazeau River, and from Highway 16 between Hinton and Edson north to the junction of the Berland and Athabasca Rivers. It was often associated with several species of leaf rollers and the percentage of damage caused by each species was difficult to assess. Parasitism of Bruce spanworm was very low throughout the Province.

Leaf rollers on aspen. Leaf rolling larvae were present throughout much of the area in which aspen grows. Three species were present; Pseudexentera prob. oregonana Wlsh., Compsolechia niveopulvella Cham., and Choristoneura conflictana Wlk. Pseudexentera, which was first identified from this region in 1958, has never been recorded as an important insect in Alberta. It was the most common leaf roller in 1958, accounting for 75 per cent of the rolled leaves in most areas. Larvae of Compsolechia niveopulvella were much less numerous than last year, particularly in the southern portion of the eastern slopes. Choristoneura conflictana was responsible for a very small number of the rolled leaves. Although larvae of these leaf rollers were numerous, defoliation was light to medium. On some trees at the edges of aspen stands 70-90 per cent of the leaves were rolled but the actual amount of foliage destroyed was estimated at less than 40 per cent, since many of the rolled leaves remained green. Since the areas

infested by these rollers were the same as those infested by the Bruce spanworm it was difficult to assess the damage.

Spruce budworm (Choristoneura fumiferana - Clem.) Small numbers of larvae were present along the southern end of the eastern slopes of the Rocky Mountains near Coleman and Blairmore, and in the Porcupine Hills damage was negligible.

Yellow-headed spruce sawfly (Pikonema alaskensis-Roh.) A small infestation on Engelmann spruce south of the Gap Ranger Station in the Livingstone district remained active. In 1958 twigs and needles were very short. Past defoliation, plus 50 per cent defoliation of the current year's growth, left the trees with very little foliage.

Pine needle scale (Phenacaspis pinifoliae-Fitch). The infestation of pine needle scale along the York Creek Road south of Coleman was one mile long by one and a half miles wide. In the centre of this area a small section one-quarter mile across was severely infested; the trees had lost about 50 per cent of their foliage. Examination late in the fall revealed that new scales were less numerous than they had been in the fall of 1957. The coccinellid predator, Chilocorus stigma-Say) was again present. Pine needle scale was found on lodgepole pine throughout much of the extreme southwestern part of the Province and in the Cypress Hills. A light infestation was observed south of the Waterton townsite along the trail to Bertha Lake.

Black-headed budworm (Acleris variana-Fern). Larvae were more plentiful in the Clearwater Forest than in 1957. Light damage was reported in the vicinity of the Strachan Ranger Station and west of Ricinus. Elsewhere in the region damage was negligible.

FOREST OPERATIONS

Harvesting and manufacturing of wood products increased during the year 1958-59 but bidding on new berths was less competitive. The number of timber applications and timber berths was down from the previous year but this is not necessarily indicative of reduced interest. Board regulations established a reservation on a large block of timber in the Clearwater Forest pending management plans, and applications for Dutch Creek timber in the Crowsnest Forest continued to be rejected. Because of a lack of competition at sales, only those berths required to keep operators going were offered for sale.

New timber applications and estimated volume of timber for the year 1958-59 were as follows:

	<u>No. of Applications</u>	<u>Estimated Volume</u>
Crowsnest Forest	3*	61,134,000 f.b.m.
Bow River Forest	6	53,850,000 " "
Clearwater Forest	20	42,319,000 " "
	<hr/>	<hr/>
	29	157,303,000 " "
	<hr/>	<hr/>

* Also 4,200 cords of pulpwood and 200,000 lineal feet round timber.

New Timber Berths Sold

	<u>No. of Berths</u>	<u>Estimated Volume in Millions f.b.m.</u>				
		<u>Spruce</u>	<u>Pine</u>	<u>Fir</u>	<u>Douglas</u>	<u>Fir</u>
Crowsnest Forest	1	-	-	-	1.69	
Bow River Forest	5	22.44	7.29	1.23	-	
Clearwater Forest	4	-	1.80	-	-	
	10	22.44	9.09	1.23	1.69	

FOREST All products harvested and manufactured from
 PRODUCTION the Conservation Area, except round timber,
 increased appreciably after a general decrease
 the previous year. Lumber production increased greatly in
 the Crowsnest Forest. Christmas tree sales, mainly in the
 Bow River Forest again increased. The following table
 indicates products sold and increase or decrease from last
 year.

Production of Lumber and Related Products

	<u>1957</u>	<u>1958</u>	<u>Decrease or Increase %</u>
Lumber and ties (million f.b.m.)	56.79	68.15	+ 20.00
Round timber " "	3.42	3.38	- 1.16
Pulpwood (cords)	4,865	8,529	+ 75.31
Christmas trees	4,710	7,641	+ 62.22

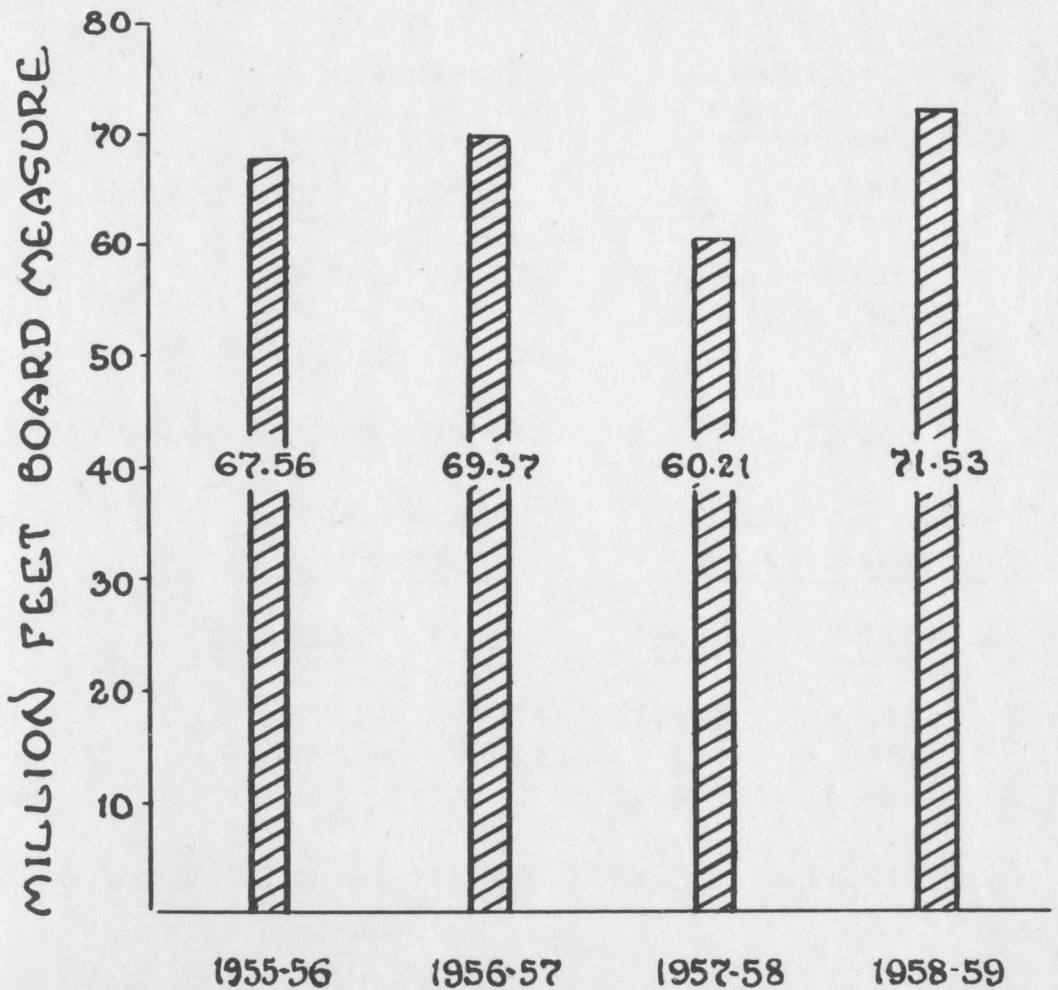


Fig.1 LUMBER TIES & ROUND TIMBER PRODUCED ON ROCKY MOUNTAINS FOREST RESERVE.

GRAZING OPERATIONS During 1958, three hundred permits were issued permitting, 23,542 head of domestic livestock to consume 84,912 animal unit months of grazing in the Forest Reserve. In addition, fourteen grazing leases for cattle and one for horses are still in effect. Although use of the grazing resource showed a slight decline in 1958, the total use over the past seven years has remained relatively constant. The following table shows the total number of each class of livestock and the amount of forage consumed in each forest during 1957 and 1958.

	<u>Crowsnest Forest</u>		<u>Bow River Forest</u>	
	<u>1957</u>	<u>1958</u>	<u>1957</u>	<u>1958</u>
Cattle	13,940	13,009	7,935	7,606
Horses	-	-	214	385
Sheep	1,000	1,000	-	-
A. U. M. Used*	52,196	49,037	32,720	33,265

	<u>Clearwater Forest</u>		<u>Rocky Mountains Forest Reserve</u>	
	<u>1957</u>	<u>1958</u>	<u>1957</u>	<u>1958</u>
Cattle	624	775	22,499	21,390
Horses	325	167	539	552
Sheep	-	-	1,000	1,000
A. U. M. Used*	4,364	2,610	89,280	84,912

* A. U. M. = Animal Unit Months: The grazing required to supply a 1,000-pound cow and calf for one month.

RECREATIONAL USE During the year under review a total of 60,017 vehicles carrying 189,654 passengers registered at the various points of entry to the Forest Reserve. This compares with 57,004 vehicles and 185,914 persons registered during the 1957-58 season, an increase of 3,740 persons or two per cent.

The Bow River Forest again drew the highest percentage of registered travellers, 61.2 per cent followed by the Crowsnest Forest with 23.6 per cent and the Clearwater Forest with 15.2 per cent.

Travel figures for 1958-59 by forests as compared with the previous year are shown below:

TOTAL NUMBER OF REGISTERED TRAVELLERS
BY FORESTS

	<u>1957-58</u>	<u>1958-59</u>	Increase or Decrease*	Per Cent Increase or Decrease*
Crowsnest Forest	46,909	44,755	2,154*	4.6 *
Bow River Forest	111,190	116,108	4,918	4.4
Clearwater Forest	27,815	28,791	976	3.5
Total	185,914	189,654	3,740	2.0

It will be noted that travel in the Forest Reserve showed only a slight increase over the previous year which is attributed in part to an extreme forest fire hazard which existed in October and November. Travel was restricted for twenty-three days in both the Bow River and Clearwater Forests during this period, and to a lesser degree in the Crowsnest Forest. Big game and upland bird hunting privileges were cancelled in a number of forest districts for the first two weeks of November.

The highest incidence of travel was again recorded in the Kananaskis Lakes area which accommodated some 31,066 persons. This is an increase over the preceding year of 1,950 persons or 6.7 per cent.

The increase in travel from year to year, particularly in those districts close to highly populated urban centres, points out the need for expanded camping and picnicking facilities.



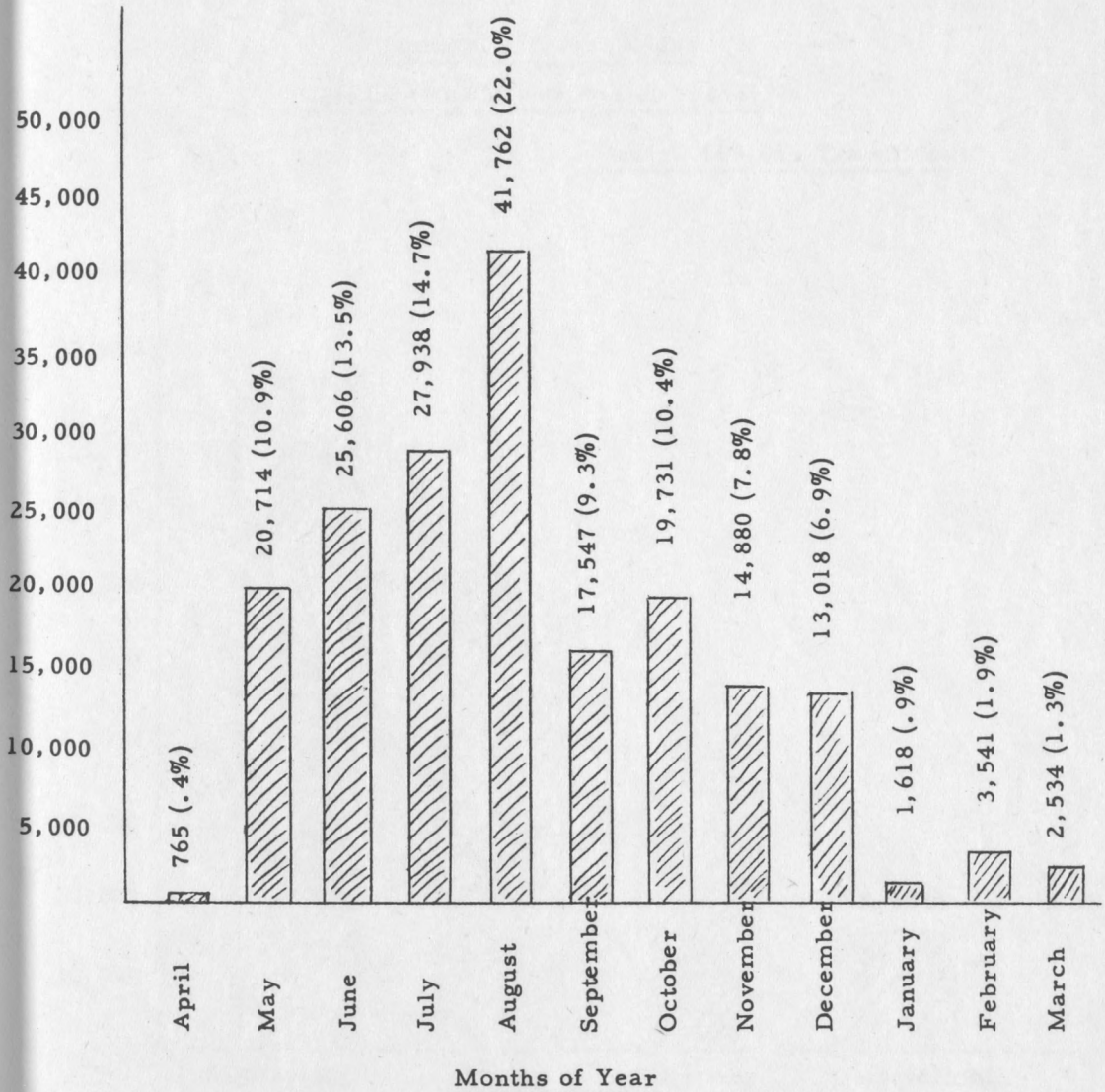
Ram Falls - Clearwater Forest
A Popular Recreation Area

Travel varies by districts from year to year as the tributaries to the main streams are closed to fishing in alternate years. For instance, the number of fishermen registered in the Ghost district of the Bow River Forest increased by 134.8 per cent over the preceding year since tributaries were opened to fishing in this area, whereas the number of persons registered as fishermen in the Elbow and Highwood districts dropped by 73.6 per cent and 47.1 per cent respectively, where the tributaries to the main streams were closed to fishing.

The following chart reflects the travel trend by months:

Frequency of Travel by Months

Basis: 189,654 Persons

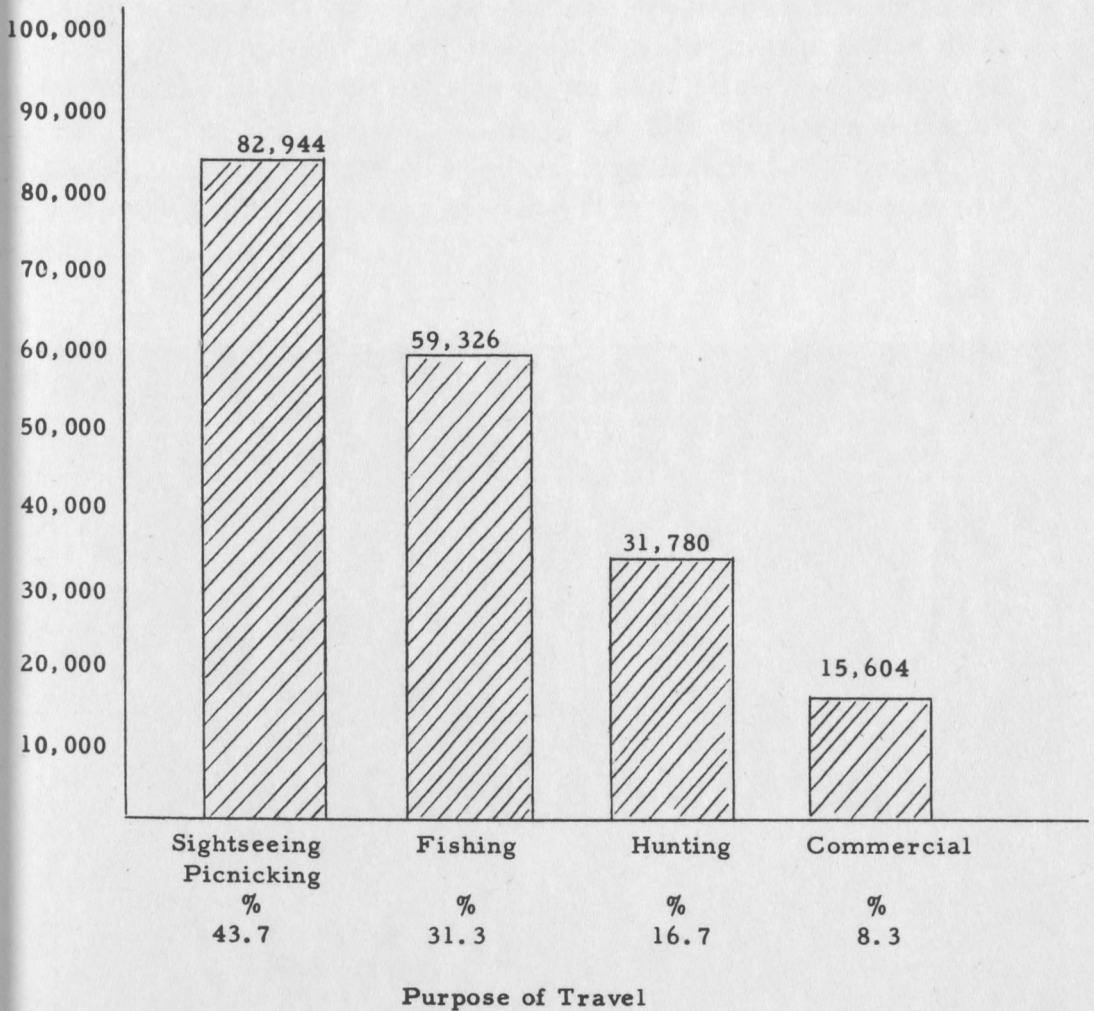


As indicated by the above chart 22.0% of the travel in the forest area was recorded during the month of August last year followed by July with 14.7% and June with 13.5%. Travel remained fairly constant during the month of May and September through December, averaging about 9% of the total travel in each of these months.

The purpose of travellers visiting the Forest Reserve during the year is summarized in the following charts:

Number of Forest Users
Classified as to Purpose of Travel

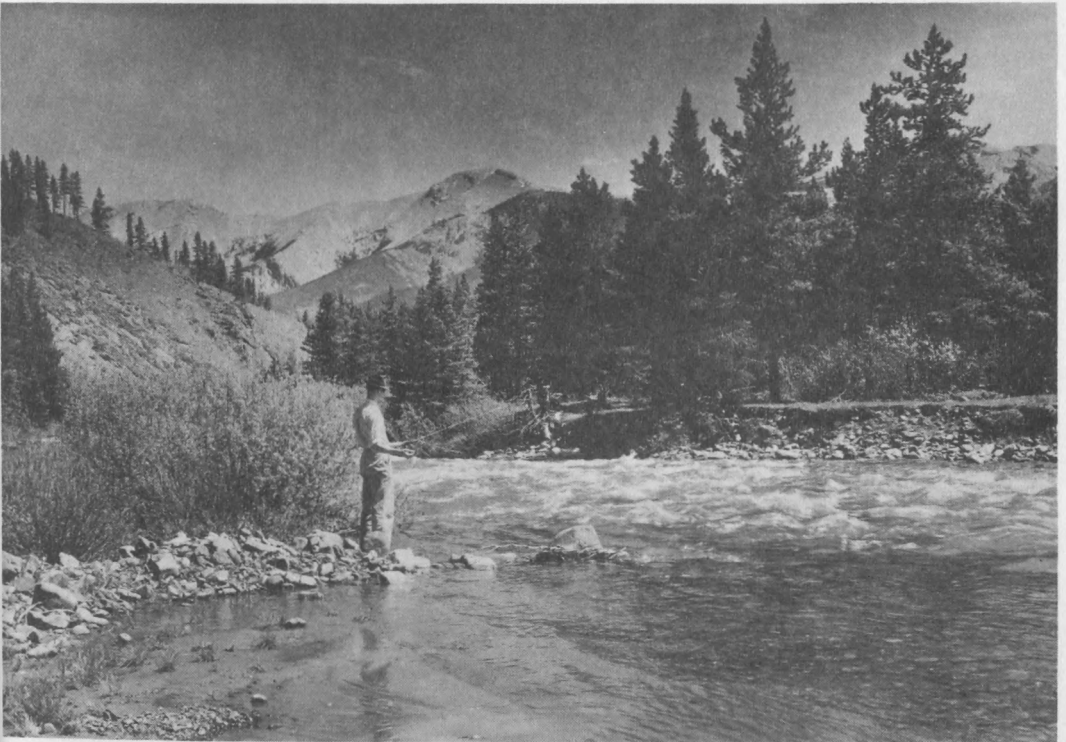
Basis: 189,654 Travellers



Sightseers and picnickers again formed the largest group of forest users, comprising 82,944 persons or 43.7 per cent of the total.

Experience shows that these travelers do not constitute a serious fire hazard, providing they do not stray too far afield from the main roads. They are encouraged to use the camp grounds and the facilities provided for camping and picnicking.

Fishermen and hunters of which some 91,106 registered in the Forest Reserve, were found to be more of a problem as they generally make camp some distance from the main roads where no facilities are provided for camp or cooking fires. Camps of this type are difficult to inspect and constitute a serious fire hazard. Forest areas were closed during extreme fire danger in order to control this hazard.



Fishing At Cataract Creek
Bow River Forest

BIG GAME
REPORT

In 1958 the Rocky Mountains Forest Reserve was divided into eight zones for the purpose of big game hunting. The open season for sheep and goat commenced September 1st, and closed September 30th in zones south of the Bow River. The sheep and goat season north of the Bow River closed on October 18th, and in the Special Areas October 31st, 1958. The deer, elk and moose season varied with the zone, but in most areas opened on October 20th, and closed December 13th. Due to an extreme fire hazard in October and early November, it was necessary to close most of the Forest Reserve to hunting until November 13th. The season for deer and elk in some zones was extended to December 23rd. An extension until March 31st was made in the Ya Ha Tinda area of the Bow River Forest for male and female elk.

During the season 23,839 big game hunters registered in the Forest Reserve. The Forest totals were as follows:

Crowsnest Forest	5,933
Bow River Forest	11,984
Clearwater Forest	5,922
	<hr/>
	23,839
	<hr/> <hr/>

There were 8,175 more hunters registered during the Big Game season of 1958.

LEGAL GAME TAKEN FROM FORESTS

	Elk		Moose		Deer		Sheep	Goat	Bear	Total
	F	M	F	M	F	M				
earwater rest	124	114	40	83	-	131	25	42	2	561
ow River rest	134	233	149	178	2	224	24	40	13	997
owsnest rest	207	356	-	49	545	342	23	10	2	1,534
<hr/>										
tal for cky untains rest Reserve	465	703	189	310	547	697	72	92	17	3,092

*This includes 3 Elk taken by Bow and Arrow.

ILLEGAL GAME FOUND ON PATROL
OR REPORTED AS ACCIDENTALLY SHOT

	Elk		Moose		Deer		Sheep	Total
	F	M	F	M	F	M		
earwater rest	2	1	4	-	4	-	-	11
w River rest	15	6	8	5	5	-	1	40
owsnest rest	4	-	5	4	-	1	-	14
<hr/>								
	21	7	17	9	9	1	1	65

MAN DAYS ON GAME PATROL

	<u>Sept.</u>	<u>Oct.</u>	<u>Nov.</u>	<u>Dec.</u>	<u>Total</u>
Clearwater Forest	8-1/2	55	114	88	265-1/2
W. River Forest	55	86-1/2	216-1/2	216-1/2	574-1/2
Yowsnest Forest	13-1/2	56-1/2	92	107-1/2	269-1/2
	77	198	422-1/2	412	1,109-1/2

Grand total of animals killed in the Rocky Mountains Forest Reserve during 1957 and 1958 was as follows:

	Elk		Moose		Deer		Sheep	Goat	Bear	Total
	<u>F</u>	<u>M</u>	<u>F</u>	<u>M</u>	<u>F</u>	<u>M</u>				
1957	115	573	307	471	206	694	68	77	9	2,520
1958	486	710	206	319	556	698	73	92	17	3,157

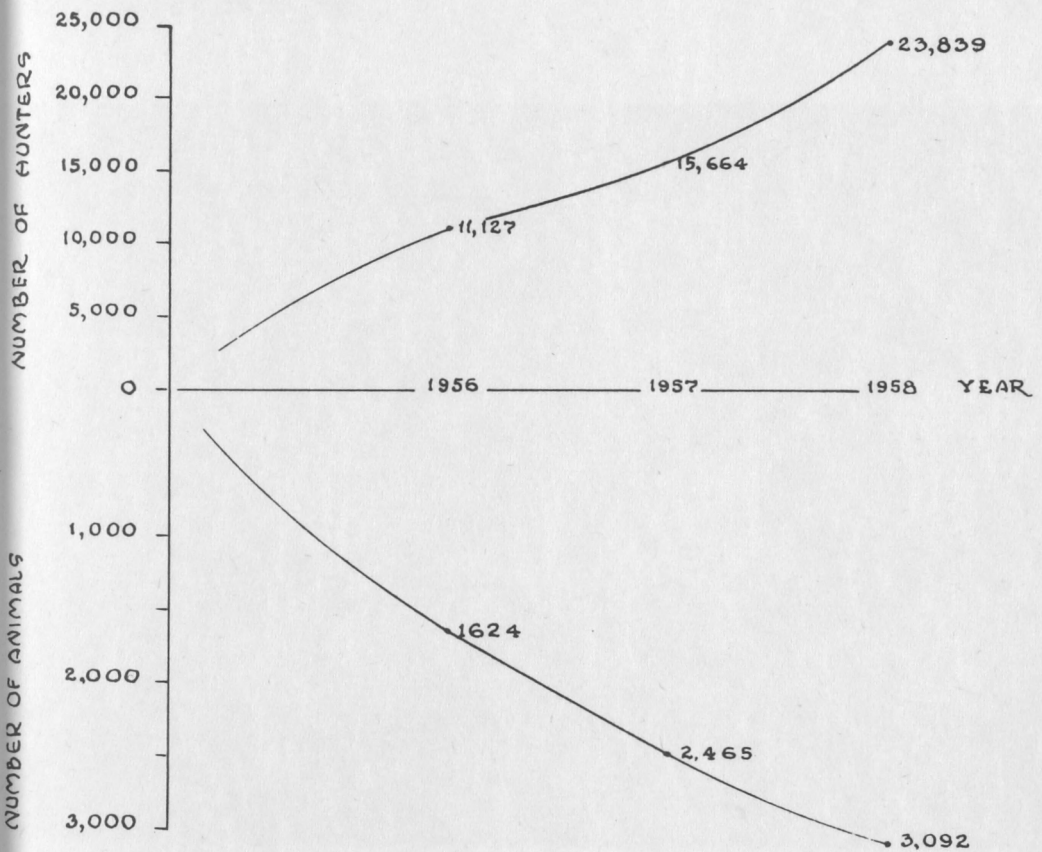
Only 12.6 per cent of the hunters were successful. According to statistics, this is a lower percentage in comparison to 1956 or 1957. An increase of 627 big game animals were removed from the Forest Reserve.

There were 21 prosecutions under the Game Act, primarily due to failure to register firearms, hunting from a vehicle, and illegal possession of big game. A decrease of 35 prosecutions was noted in comparison to the 1957 hunting season.

In addition there were five infractions under the Forest Reserves Act within the Clearwater Forest for travelling on a closed road.

The following graph indicates the increase of big game animals taken annually from the Rocky Mountains Forest Reserve and also the number of hunters registered during the hunting season:

HUNTERS REGISTERED



BIG GAME ANIMALS KILLED

INDUSTRIAL

PETROLEUM AND NATURAL GAS

Geophysical exploration crews continued to work in the Rocky Mountains Forest Reserve during the 1958-59 fiscal year. Most major oil companies were represented.

The drilling of oil and gas wells continued within the Forest Reserve. Eight new wells were drilled during the year and natural gas was found at several locations.



Seismic Party in Foothills District
"Shell Oil Company Photograph"

FOREST RANGE AND WATERSHED MANAGEMENT

FOREST The timber inventory of the Conservation
MANAGEMENT Area continued during the year and some
 preliminary forest-cover maps were
completed.

 The timber reservation area in the
Clearwater Forest was continued pending completion of the
inventory and formulation of a management outline for the
area.

 Efforts were continued to have timber
operators prepare and follow operational plans, with stress
upon watershed conservation and regeneration. An outline
to guide operators in preparing both their general and annual
operational plans was prepared in conjunction with the Forest
Superintendents, and made available to the operators.

 Inspections were made by Board and
ranger staff to see that conservation requirements included
in the conditions of sale of some recently-sold berths were
being carried out. Generally, measures were not taken to
avoid erosion on the haul system and it was necessary to
notify the licensees in writing requiring action to prevent
further soil erosion and silting of streams.

 Experimental planting and seeding on cut-
over timber land were continued. Ten thousand trees,
mostly white spruce with a few pine, were planted in both
spring and fall. Part were 2-0 and part were 2-1 seedlings
or transplants. Because of the rocky soil, rough terrain
and logging debris, all planting was done by hand. Artificial
seeding with Douglas fir and white spruce seeds which had
been coated with endrin and flaked aluminum was done on
both logged-off and burned land. Seedbeds were established
at two ranger stations and seeded in the fall.

Observations continued to indicate that 2-0 seedlings are more practical than older stock but 1-0 stock is too small and fragile. Fall planting shows promise in our region with a much longer planting season than spring. Hand planting with a bar has proved relatively fast and survival fair, but cost per acre is high.

Direct seeding with coated seed on burned-over and logged-off land gave a good stand of germinants where some seedbed preparation by baring mineral soil was done on the logged-off land. Further observations will determine if a satisfactory stand becomes established. This method appears to be successful and cheaper than planting.

Good germination of Douglas Fir was obtained in the seedbeds. This stock will be ready for planting as 2-0 seedlings in 1961. With the promising results of direct seeding, tentative plans have been made for seeding logged-off lands and burns where natural forest regeneration does not occur. Seedbed preparation by scarification after logging indicates promise and is being used, but experience shows that natural seed crops of spruce are infrequent and the seedbed preparation may lose its effectiveness before seed is available unless seeded artificially. In order to build up a supply of seed for artificial seeding and also for nursery planting a program of cone collecting was started on a limited scale. Forestry staff and a work crew were used to gather Douglas Fir cones in the Porcupine Hills, white spruce on Lee Creek and lodgepole pine cones were purchased in the Bow River and Clearwater Forests. Cones were shipped to the Alberta Department of Agriculture nursery at Oliver for extraction and cleaning. Two hundred and sixty pounds of Douglas Fir seed, 12 pounds of white spruce and about 50 pounds of lodgepole pine were collected.

The following prices were approved to be paid for mature unopened cones of reasonable quality:

White or Engelmann spruce	\$ 3.75 per bushel
Douglas fir	3.50 " "
Lodgepole pine	2.00 " "

The Forest Regeneration Survey conducted in the Crowsnest Forest by the Forestry Branch of the Department of Northern Affairs and National Resources was continued. The survey section of the study was completed and a report is being written. A preliminary report has been useful in indicating the sites where efforts at reforestation can best be applied. As a result, the well-drained bottomland sites have been selected for current scarification operations.

The study of causes of poor regeneration and methods of improving it is to be conducted and offers a promise of assistance in forest management planning.

RANGE Work continued on range inventory and
MANAGEMENT the writing of range-management plans.
Plans have been completed and put into
operation on 74 out of 79 grazing allotments within the
Forest Reserve.

Inspections by headquarters staff were continued and rangers' inspections insisted upon. Instructions in making range inspections and managing the grazing resource were given to eight rangers on the ground and to all the ranger staff in meetings.

The influence of grazing upon watershed values continued to be studied. Stocking rates of several allotments have been reduced in order to insure sufficient plant residue to keep the infiltration rate and water-holding capacity high.

Watershed values are given a prior position on range land but it appears that good watershed condition can be maintained under properly managed grazing. Therefore, because of the important contribution of the use of the forest ranges to the livestock economy of the foothills, grazing is considered a wise use. However, it is very essential that careful attention be given to regulating and controlling the grazing use and efforts in this regard were increased during the year.

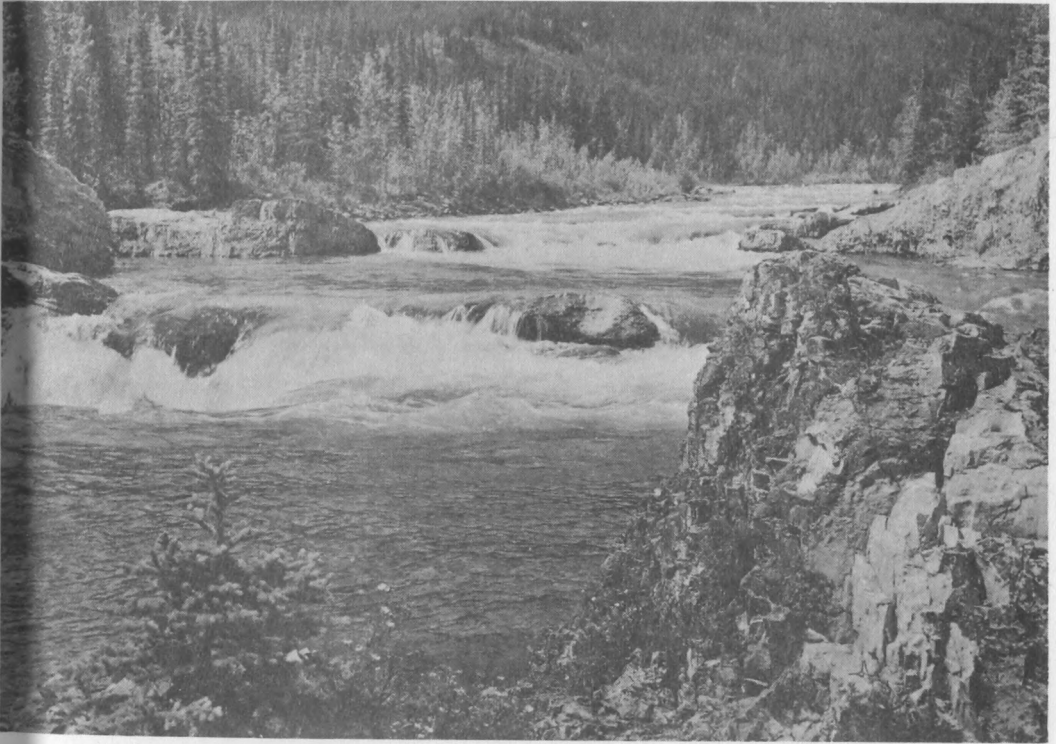
A study of range watershed condition was continued through the recording of permanent line transects as well as by inspections by rangers and Board staff. The records of line transects read during the year indicate an improvement in ground cover and percentage of desirable species. Both general observation and transect records indicate general improvement. The upward trend which began with the present system of observation has levelled off during recent years. Some localized areas are still in unsatisfactory condition and will require improvement in management.

STOCK-WATER Lack of stock-watering places in the
DEVELOPMENT Porcupine Hills has been one of the
 major causes of overgrazing around
the natural water holes and under-utilization elsewhere. The possibility of water development was investigated and the stock associations using the allotments were encouraged to develop water where most likely to obtain satisfactory results. Assistance was obtained by the associations under the Prairie Farm Rehabilitation Act. Sixteen dugouts and dams were constructed and one spring developed. The results were very gratifying. Only two dams failed to hold water because of the type of soil and nearness to permeable bedrock and only three dugouts failed to collect enough water to last throughout the summer. Dams or dugouts below seep-springs were most successful. The construction of a collecting basin connected to troughs proved to be a satisfactory way to improve a spring which would not adequately supply cattle when they trample it.

It was noted that both deer and elk made use of the water development.

In case of a fire in the vicinity of the dams or dugouts, water could be pumped for suppression action.

Further sources of water and ways of sealing up porous reservoirs are being investigated.



Water - A Product of Forest Land

WATERSHED MANAGEMENT

Watershed management has taken two forms; regulations applied to timber berths and other uses of forest land to insure good watershed conditions, and projects aimed at actually improving the watershed. In the first category, all major timber berths included a clause which reads as follows:

"All roads shall be located and constructed so as to cause a minimum of erosion damage and sediment deposit in stream channels. No road shall restrict the natural flow of a stream. Bridges and culverts shall have sufficient clearance to allow the peak flow carrying a normal burden of debris. On abandonment of skid roads and trails, the licensee shall divert the drainage from same into safe channels and take such other action to prevent erosion as may be directed by a Forest Officer."

Two berths have been inspected by this office in company with the local ranger to determine what action should be taken to leave the berth in satisfactory condition following logging. The ranger was given assistance in assessing conditions and action to be taken. The operators were then given written instructions as to what they should do. Such inspections with subsequent instruction to the operators have become regular procedures.

On grazing allotments, stocking rates and livestock handling have been adjusted to avoid overuse with optimum watershed conditions in mind.

In the second category of watershed management two improvement projects were given final inspection during the year.

Road Erosion Control Project. The building of many miles of trunk road through the conservation area contributed appreciable amounts of sediment to the streams. A project to devise suitable means of minimizing the sediment load added to streams was undertaken. Cuts, fills and borrow pits were treated by one of the following methods: (1) seeding to grass and clover mixture, (2) wattling with shrubby plants and (3) contour trenches and seeding. Conclusions after final inspection were:

1. After ten years the raw surface of most of the cuts and fills has healed.
2. Healing and the prevention of erosion was much more rapid with treatment.
3. All of the treatments were effective and the wattling and seeding gave most rapid and thorough control.
4. The seeding to a mixture of grass and White Dutch clover did not create any more of a fire hazard than the weedy plants which came in. Where livestock grazed, the fire hazard was less on seeded areas than on those invaded by weedy species and taller grasses.

Erosion Control on Range Land. A project was begun in 1951 to determine the best means of checking and healing gully erosion on overgrazed and poorly-managed range land. This was continued with several methods tried and is now being concluded. The early work indicated that diversion of water is necessary for healing of gullies and as a result a new phase of water spreading was added. The project yielded very useful information and further watershed improvement can now be done on the basis of results obtained. The following conclusions were drawn:

- (1) Of the various types of check-dams tried some are effective in checking further deepening of gullies but none allowed the gullies to heal or removed the cause of the trouble.
- (2) Sod dams in shallow gullies and connected with a system of contour furrows to spread the water were effective.
- (3) The best treatment for large gullies is a diversion of the water causing the trouble into safe channels.

- (4) If permeable soils such as gravel beds or rocky coarse soils without a well-defined drainage are present in the locality, water can be diverted to these and thereby enhance groundwater supply. In this project water is diverted to a pine covered bench of rocky gravelly material with a series of three depressions without outlets. The diverted water spills into these depressions in series and percolates rapidly into the ground. Any excess spreads out through the pines and eventually returns to the original channel in a broad sheet of water over a well-vegetated course. Much runoff from the snow-melt and spring rains which formerly rushed to the river, carrying a heavy silt load, now reaches the river via the underground later in the summer and in a pure clear condition.
- (5) Seeding of all disturbed soil to grass and distributing the cattle by the use of improved salting, stock-watering development and changing of fences were necessary in order for the project to be entirely successful.

The practice of water spreading to delay rapid runoff and to increase the flow in the streams during summer may be applied to many minor drainages as watershed improvement.

MANAGEMENT UNIT PLANS

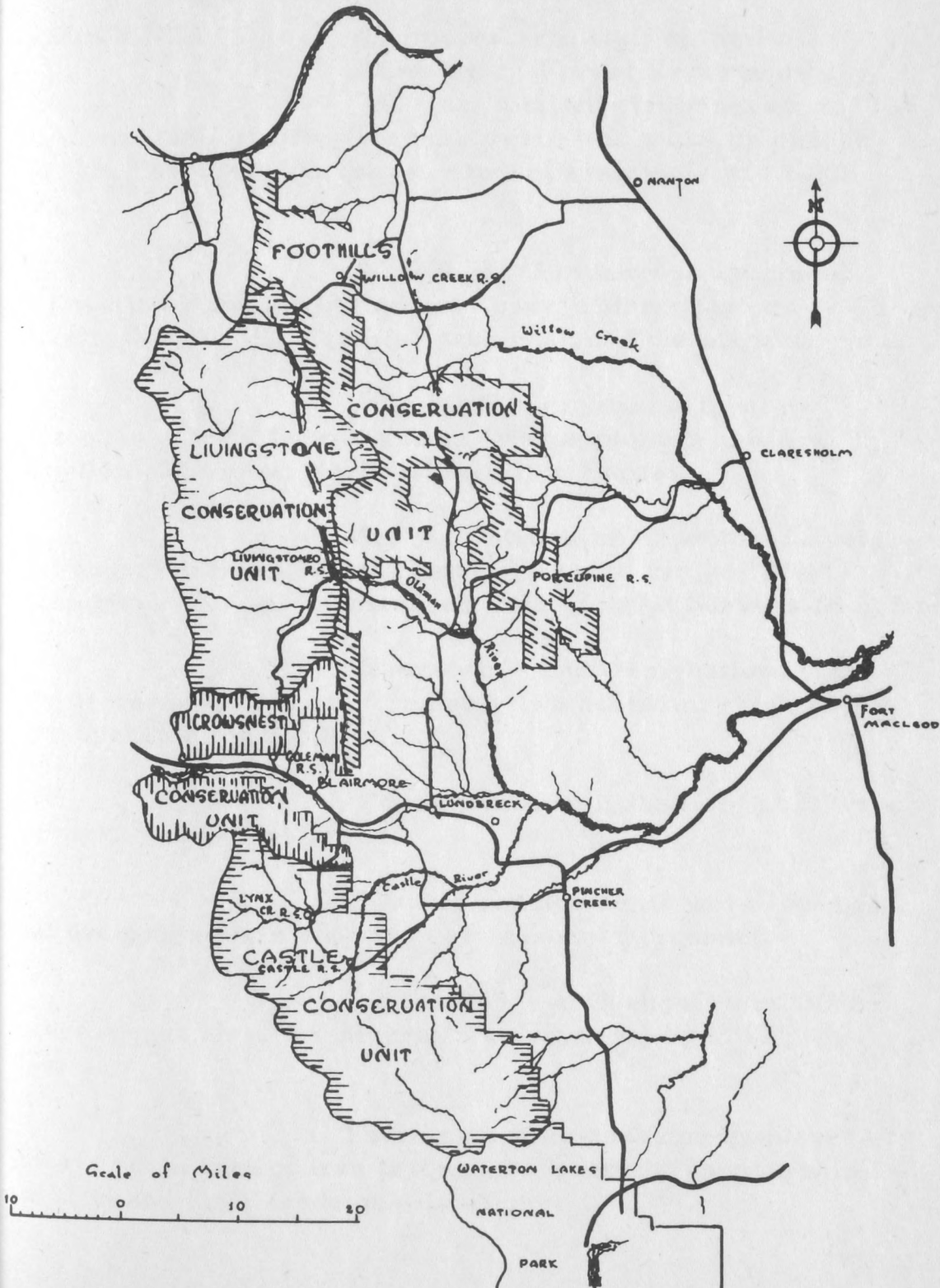
With the establishment of the Conservation Area, watershed values became the prime concern of management, and the major objective of planning was to insure the adequacy, quality, and proper timing of the water supply flowing from the head-waters of the Saskatchewan River. Early studies indicated that all of the forest resources of the area could be utilized without damaging the watershed. Careful planning is necessary in order to co-ordinate all of the various resources so as to protect or improve the watershed. The division of the Conservation Area into management units for which such plans could be drawn up progressed during the year under review.

The Crowsnest Forest was divided into four conservation units as indicated on the following map. Each unit has a problem, or problems, common to much of its area. Each is mostly within one drainage basin or physiographic unit and can be administered as a unit.

The basic information has been gathered for the Livingstone conservation unit. It has to do with climate, geology, vegetation, stream-flow, snow-pack, grazing, recreation and lumbering. A management guide for the co-ordinated utilization of the forest resources of this unit is in course of preparation.

CONSERVATION MANAGEMENT UNITS

CROWSNEST FOREST



ADMINISTRATION AND MAINTENANCE

PERSONNEL

The permanent staff of the Rocky Mountains Forest Reserve during the year totalled eighty persons. The seasonal staff of fifty-five employees was made up of look-outmen, suppression crews, student assistants and road crews.

Mr. P. L. Brooks was appointed Protection Planning Officer at Reserve Headquarters replacing Mr. O. K. Bradwell who resigned the previous year.

Mr. B. F. Simpson, a forestry graduate in 1958 from Montana, was appointed to a new position of forester at the Clearwater Forest.

Mr. G. Ontkewan was appointed Assistant Superintendent, Clearwater Forest to replace Mr. J. A. Schalkwyk who was transferred to the Forest Surveys Division.

There were four resignations from the permanent field staff, namely two assistant rangers and two operator mechanics.

Four members of the field staff were promoted and transferred.

Suitable replacements were found for all vacancies from the ranks of seasonal personnel.

At the Reserve Headquarters Office, clerk-typist Mrs. M. Murray was replaced by Miss B. J. Cook.

Three mechanic-operator employees took a two month course through Government sponsorship to increase their trade qualifications.

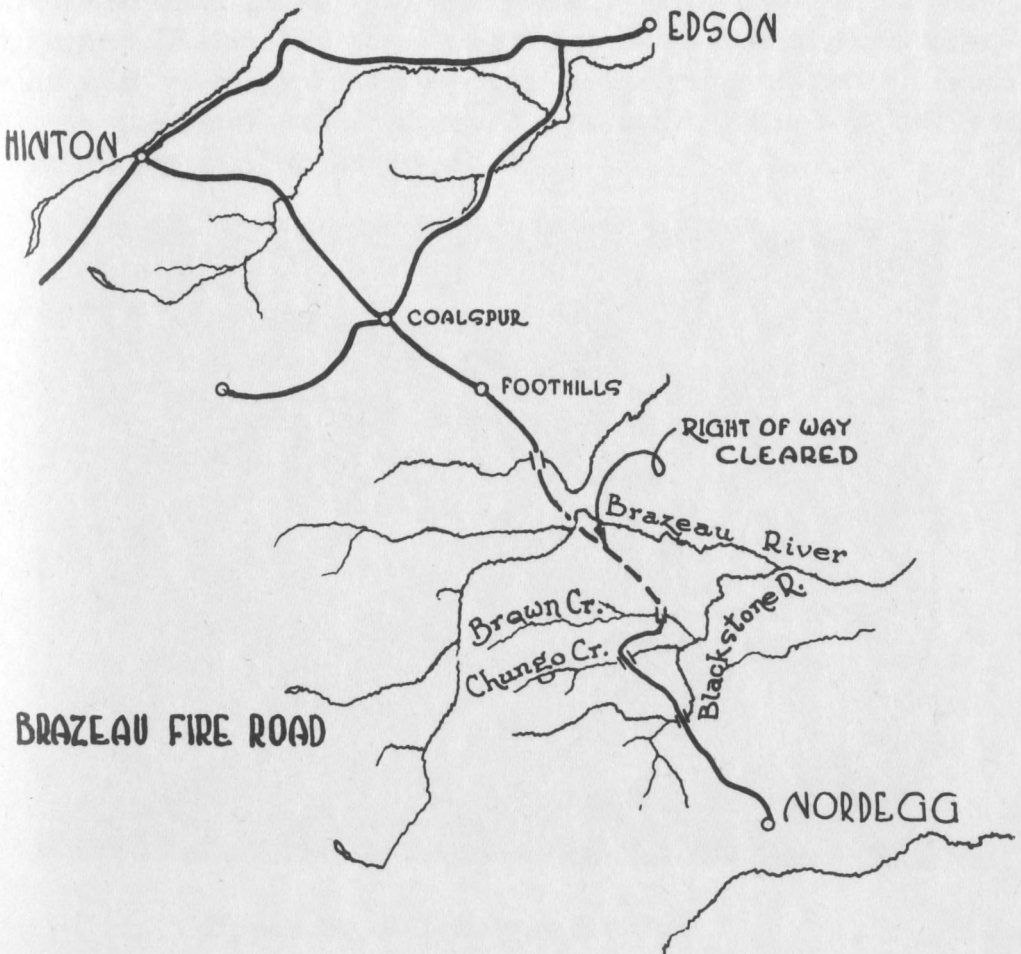
Six assistant rangers from the Forest Reserve attended the annual ranger school. All passed their examinations successfully.

The regular annual ranger meeting for all personnel was held in 1958. Field and office problems were reviewed and discussed for two days.

ROADS AND BRIDGES

NEW CONSTRUCTION

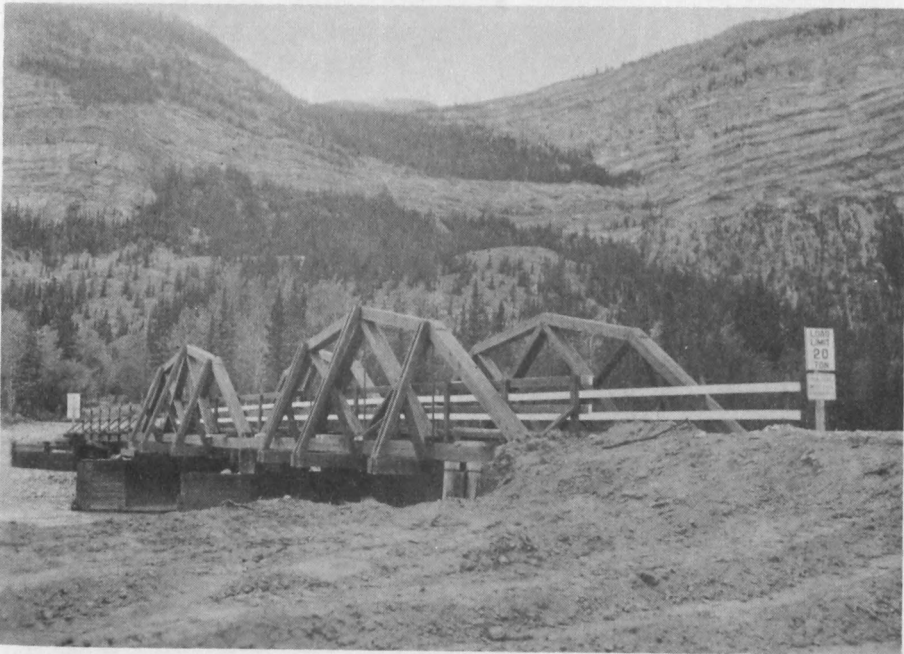
Brazeau Fire Road. Eleven miles of right-of-way was completed under winter development funds during the year. The clearing varied from 75 feet to 125 feet depending on the topography. This road will eventually join the towns of Nordegg, Hinton and Edson.



Bighorn Fire Road. Clearing and burning of right-of-way for 12 miles was completed on this new fire access road in the Saskatchewan District of the Clearwater Forest.

Fallen Timber Fire Road. Five and one-half miles of right-of-way was cleared and burned to a width of 75 feet. This fire access road in the Ghost District of the Bow River Forest will eventually be 12 miles long and will link the Forestry Trunk Road to the Harold Creek Road by way of Fallen Timber Creek.

Sharples Creek Access Road. Six miles of new grade was constructed during the year and eleven miles of grade was gravelled. This road is in the Porcupine District of the Crowsnest Forest and when completed will give improved access to the ranger station from both the east and west. Some 2-1/2 miles of new grade and gravelling is still to be done.



Upper Saskatchewan Bridge
Clearwater Forest

Upper Saskatchewan Bridge. A new 176 foot native timber bridge was constructed across the North Saskatchewan River at a point approximately 40 miles west of Nordegg. The bridge has a pile bent approach and two 56-foot pony trusses. All material was surface treated with "penta" preservative. The cost of material and labor for the bridge was \$14,500.

Cutoff Creek Bridge. This bridge spans the Clearwater River and gives important access to the Clearwater Truck Trail. It was constructed of native timber treated with "penta" preservative. It has a total length of 96 feet with two 16-foot spans and one 32-foot Queen truss span. The approaches and piers were all pile driven.

Sheep River Bridge. This bridge crosses the Upper Sheep River in the Sheep District of the Bow River Forest. The 64 foot native timber bridge has three spans, the longest being 32 feet with a deck truss. All bents are on concrete piers.

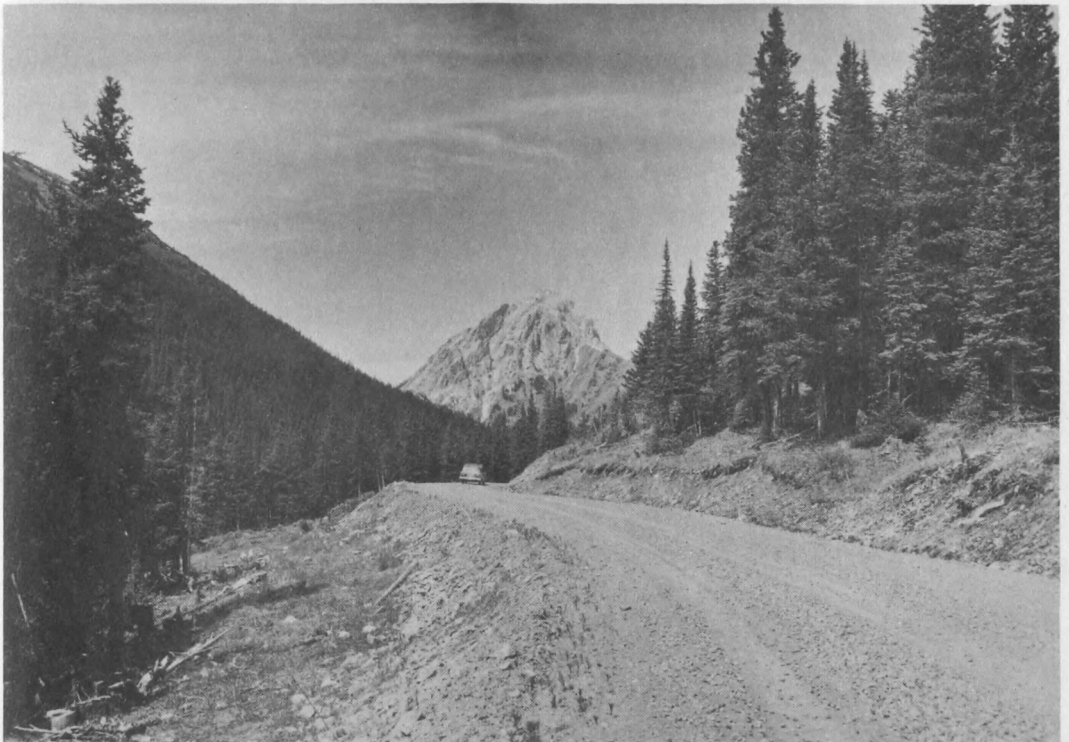
One small 20-foot bridge was constructed across Willow Creek in the Crowsnest Forest.

MAINTENANCE Five graders maintained 468 miles of gravel road during the summer and fall months. The 302 miles of the Forestry Trunk Road is included in this figure. Due to the large amount of traffic on the roads the graders are required to work steadily and for long hours each day to keep the grades in shape. Truck trails and lookout roads were maintained by bulldozers as required. The forestry dragline was in constant use for pile driving and clearing of slides.

The gravelling program for the Trunk Road and the Red Deer Access Road was accelerated. The stockpiles of gravel accumulated when the Trunk Road was

constructed were depleted in many Districts and additional crushing of gravel was necessary. Twenty thousand cubic yards of crushed and pit run gravel was placed on 89 miles of road. The total cost of crushing and gravelling amounted to \$ 31,300. The road toll fund accounted for \$ 27,191.93 of this amount with the remainder being debited to the regular road appropriation.

Seventeen of the seventy bridges on the Forestry Trunk Road were cleaned and painted. All bridges were inspected and rods tightened where necessary. Four gabions were installed to protect the bridge approaches of the South Ram River from erosion. The main channel under the North Saskatchewan bridge required approximately 100 hours of dredging to stabilize the direction of river flow. This was done with two D-7 bulldozers.



Forestry Trunk Road
Bow River Forest

BUILDINGS

NEW

CONSTRUCTION

The construction foreman for the Forest Reserve developed plans and supervised construction of new buildings. Most of the labor was hired for the work although ranger staff did help on the projects.



Upper Saskatchewan Ranger Station

A new ranger station was built in the Clearwater Forest on the North Saskatchewan River 34 miles southwest of Nordegg. The buildings were of frame construction and consisted of combination house and office, double garage-storehouse, barn and lighting plant.

At the Nordegg Ranger Station in the Clearwater Forest an implement shed and a double garage were constructed.

A boathouse was built at Spray Lakes in the Bow River Forest.

Campground facilities were improved throughout the Forest Reserve. One new 24 by 30-foot camp shelter was constructed at Fish Lake in the Clear-water Forest. Thirty-two new fireplaces, 79 picnic tables and 71 outhouses were built during 1958.

A sign workshop was established at the Coleman Ranger Station and over 300 forest signs were manufactured.



Forest Fire Danger Index Sign
Ghost Ranger Station
Bow River Forest

MAINTENANCE

Ranger staff spent 663 mandays on building maintenance. This was in addition to time spent on maintenance by fire suppression work crews. Thirty-four buildings were painted during the year.

MISCELLANEOUS

RURAL
ELECTRIFICATION

Line power was extended to the Castle and Livingstone Ranger Stations in the Crowsnest Forest.

SPECIAL
WARRANTS

A special grant of \$40,000 was made by the Government of Alberta to help employ miners from the Crowsnest Pass area. Thirty-five men were employed on bridges. This made it possible to increase the rate of construction on fire roads in the Bow River and Clearwater Forests.

A sum of \$50,000 was made available under the Federal - Provincial winter work program for the construction of access roads and bridges. Under this program work was extended on fire access roads and particularly on right-of-way clearing.

Also as a part of the winter work program a special warrant for \$23,000 was granted for campground improvement. Under this appropriation campground facilities were expanded throughout the Forest Reserve.

REPORT OF THE SECRETARY ADMINISTRATION

MEETINGS OF THE BOARD

The Board met five times in Calgary during the year under review. Minutes of the meetings were recorded and copies submitted to the Minister of the Department of Northern Affairs and National Resources and the Minister of the Department of Lands and Forests of the Province of Alberta.

LEGISLATION

No amendments were enacted affecting the existing agreement between the Government of Canada and the Government of the Province of Alberta during the year under review.

ACCOUNTING

METHODS

The accounting system remained substantially the same as in past years with the Province continuing in its capacity as the Board's paying agent except for limited disbursements made by the administration including salaries of personnel employed by the Board who are not civil servants. This group comprises the Secretary, Chief Forester, two Technicians and one Stenographer, all of whom are stationed at the Calgary administrative headquarters.

A Financial statement was submitted to the Chairman and Board members following the close of each month's business throughout the year.

BANKING

Banking facilities are maintained with a chartered bank in Calgary from which to disburse administrative expenses of the Board including salaries of Board personnel (non-civil servants) together with Annuity payments, Hospital-Medical Plan premiums and Income Tax payments applicable to this group.

AUDIT

An audit of the books and records of the Board was carried out by the Provincial Auditor for the year ended March 31st, 1959. All records were found to be in good order and no discrepancies were reported to the Secretary.

FINANCE

EXPENDITURE

Expenditure for the maintenance and administration of the Rocky Mountains Forest Reserve provided by the Province of Alberta in accordance with Section 2(a) (11) of the Memorandum of Agreement between the Government of Canada and the Government of the Province of Alberta totalled \$624,732.32 for the year under review.

The remuneration and expenses of the Federal member of the Board were paid by the Government of Canada and are not included in the above total.

Since the close of the Capital period at March 31st, 1955, the Government of Canada is not committed to any contribution in respect to Capital improvements or maintenance of the Rocky Mountains Forest Reserve as required by the program formulated by the Board.

The accompanying certified Statement of Assets and Liabilities, together with subsidiary schedules, reflects in detail the financial operations of the Board for the period under review.

REVENUE

Revenue from surface rights derived by the Alberta Department of Lands and Forests from the Forest Reserve amounted to \$566,550.43 for the fiscal year ended March 31st, 1959, as compared with \$585,286.09 for the previous year, a decrease of \$18,735.66.

Details of revenues are as follows:

	<u>1957-58</u>	<u>1958-59</u>
Grazing Permits, Taxes and Reserve Permits	\$ 42,809.24	\$ 41,680.31
Hay Permits, Fees, Dues, Etc.	32.00	54.38
Miscellaneous Leases	1,037.98	967.58
Miscellaneous Revenue	8,218.36	6,297.22
Special Timber Permits	16,917.11	6,397.00
Timber Permits	10,845.91	11,600.17
Timber Rental Fees, Etc.	21,895.09	15,439.57
Timber Dues	477,152.83	475,546.77
Administrative Sundry Revenue	4,963.47	8,031.00
Previous Year Refunds (Income)	411.25	31.85
Timber Miscellaneous Revenue	496.80	60.00
Right of Entry	506.05	444.58
	<hr/>	<hr/>
	\$ 585,286.09	\$ 566,550.43
	<hr/>	<hr/>

In addition to the foregoing, collections by the Province with respect to road tolls amounted to \$12,342.46 bringing total credits to the fund to \$27,907.22 since road tolls were established.

Disbursements for re-gravelling of roads in the Forest Reserve, details of which are covered in the section of this report dealing with "Administration and Maintenance", amounted to \$27,191.93 leaving a balance on hand as at March 31st of \$715.29.

Revenue obtained from Road Tolls is carried in a Special Trust Fund set up by the Provincial Treasurer as authorized by the Forest Reserves Act. The revenue obtained from this source may be paid to the Board as required for the construction of additional roads or for the maintenance of existing roads within the Forest Reserve.

WORKMEN'S
COMPENSATION

The Board's deposit of \$5,000.00
with the Alberta Workmen's

Compensation Board earned interest
amounting to \$171.26 less administrative charges of \$85.00,
leaving a net credit to Proprietary Equity Account of \$86.26.

No claims for injuries were incurred
by Board personnel (non-civil servants) during the year under
review.

ESTIMATES

Estimates for the Maintenance and
Administration of the Rocky Mount-
ains Forest Reserve for the fiscal year 1959-60 were approv-
ed by the Board totalling \$780,740 allocated as follows:

	Estimates for The Fiscal Year 1959-60	Estimates for The Fiscal Year 1958-59	Increase or Decrease *
(a) <u>Salaries:</u>			
Superintendents (3)	\$ 20,520.00	\$ 18,900.00	\$ 1,620.00
Forestry Officers and Game Guardians (part) (63)	224,580.00	202,050.00	22,530.00
Clerks and Stenographers (13)	49,800.00	41,755.00	8,045.00
Miscellaneous Staff	49,985.00	39,665.00	10,320.00
Extra Assistance	8,005.00	8,000.00	5.00
	<u>\$ 352,890.00</u>	<u>\$ 310,370.00</u>	<u>\$ 42,520.00</u>
(b) <u>Expenses:</u>			
Advertising	\$ 2,000.00	\$ 1,000.00	\$ 1,000.00
Automobiles	51,960.00	45,800.00	6,160.00
Automobile Expenses	37,230.00	27,790.00	9,440.00
Clothing	4,400.00	3,650.00	750.00
Construction	40,780.00	25,800.00	14,980.00
Equipment	82,420.00	31,370.00	51,050.00
Federal Sales Tax	--	7,300.00	7,300.00*
Food	7,800.00	2,400.00	5,400.00
Heat, Light and Power	5,400.00	4,900.00	500.00
Materials	26,950.00	10,925.00	16,025.00
Printing, Stationery and Office Supplies	1,300.00	850.00	450.00
Rates, Rentals and Insurance	25,600.00	11,300.00	14,300.00
Repairs and Replacements	18,720.00	16,150.00	2,570.00
Telegrams, Telephones and Postage	2,440.00	2,360.00	80.00
Travelling Expenses	22,000.00	21,500.00	500.00
Wages	92,520.00	77,580.00	14,940.00
General	6,330.00	4,325.00	2,005.00
	<u>\$ 427,850.00</u>	<u>\$ 295,000.00</u>	<u>\$ 132,850.00</u>
	<u>\$ 780,740.00</u>	<u>\$ 605,370.00</u>	<u>\$ 175,370.00</u>

The foregoing were subsequently approved by the Legislature of the Province of Alberta under Appropriation No. 1906 as published in the Estimates for the Public Service of Alberta for the fiscal year noted herein.

J. M. Marshall,
Secretary.

GOVERNMENT OF THE PROVINCE OF ALBERTA
OFFICE OF THE PROVINCIAL AUDITOR

EDMONTON.

June 24, 1959

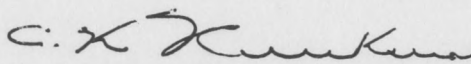
Eastern Rockies Forest Conservation Board
Calgary, Alberta

I have audited the books and records of the Eastern Rockies Forest Conservation Board for the year ended March 31, 1959 and submit the following statements herewith:

<u>Statement</u>	<u>Particulars</u>
A.	Balance Sheet
B.	Statement of Maintenance Expenditure
C.	Statement of Government of Canada and Government of Province of Alberta Equity
D.	Schedule of Movable Equipment

Total capital expenditures from inception to March 31, 1955 amounting to \$6,278,906.10 were made from funds provided by the Government of Canada as authorized under Section 8 (a) of the Memorandum of Agreement), for the location and construction of forest improvements, the making of a forest inventory, reforestation, and such other works and services as the Board considered necessary in that area of the East Slope of the Rocky Mountains forming part of the watershed of the Saskatchewan River, as more definitely described in the Appendix to the Act. The total expenditure was not to exceed \$6,300,000.00 during the seven years ended March 31, 1955.

I certify that, in my opinion, the attached Balance Sheet is properly drawn up so as to show the true financial position of the Eastern Rockies Forest Conservation Board as at March 31, 1959 according to the information and explanations given to me and as shown by the books of the Board and the accompanying statements correctly set forth the result of transactions for the year ended at that date.


C. H. Kunkin, C. A.
Provincial Auditor.

Statement A

EASTERN ROCKIES FOREST CONSERVATION BOARD

BALANCE SHEET AS AT MARCH 31, 1959

ASSETS

Workmen's Compensation Board deposit	\$ 5,086.26
Loose tools and small equipment	24,452.74
Movable equipment, less depreciation as per Statement D	174,419.65
Capital improvements and works	5,716,615.20
	<hr/>
	\$ 5,920,573.85
	<hr/>

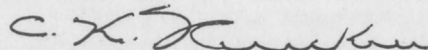
LIABILITIES

Deferred liability for equipment taken over from the Province of Alberta, to be discharged on termination of the Agreement	\$ 25,376.01
Government of Canada and Government of Province of Alberta, equity as per Statement C	5,895,197.84
	<hr/>
	\$ 5,920,573.85
	<hr/>

Note: Section 20 of the Memorandum of Agreement set forth in the schedules to Chapter 59, Statutes of Canada, 1947 and Chapter 20, Statutes of Alberta, 1948 and Amendment Act, 1957 provides that upon termination of the Agreement:

- (a) All improvements or works resulting from the carrying out of the programmes of the Board shall belong to the Province.
- (b) All other property acquired by the Board shall belong to the Province.

This is the Balance Sheet referred to in my report of June 24, 1959, addressed to the Eastern Rockies Forest Conservation Board.

 C. A.
Provincial Auditor.

Statement B

EASTERN ROCKIES FOREST CONSERVATION BOARD

STATEMENT OF MAINTENANCE EXPENDITURE

FOR THE YEAR ENDED MARCH 31, 1959

Maintenance expenses:		
Salaries	\$ 348,382.38	
Wages	57,704.30	
Motor vehicle expense	39,834.80	
New construction	16,827.81	
Travelling	15,541.94	
Repairs and replacements (other than motor vehicles)	15,523.98	
Materials	12,890.58	
Rentals	11,047.68	
Camp supplies	7,978.19	
Heat, light and power	4,875.73	
Uniforms	3,549.66	
Freight, express and cartage	1,761.97	
Retirement annuity plan contributions	1,545.09	
Printing, stationery and office supplies	1,506.40	
Postage	1,124.43	
Honoraria	2,000.00	
Telegrams and telephones	993.30	
Advertising	708.36	
Miscellaneous supplies and expenses	<u>4,697.80</u>	
		\$ 548,494.40
Movable equipment, loose tools and small equipment:		
Cars and trucks	\$ 48,642.82	
Tractors, trailers and heavy equipment	13,653.87	
Radio equipment	6,279.00	
Loose tools and small equipment	2,011.06	
Office furniture and equipment	1,256.12	
Miscellaneous equipment	<u>4,395.05</u>	
		<u>76,237.92</u>
		\$ <u>624,732.32</u>
Provided by:		
Appropriation 1906		\$ <u>624,732.32</u>

Note: The total amount expended by the Board was provided by the Government of the Province of Alberta in accordance with Section 2 (a) (ii) of the Memorandum of Agreement, dated June 17, 1953, between the Government of Canada and the Government of the Province of Alberta as set forth in the Schedules to Chapter 41, Statutes of Canada, 1952 and Chapter 36, Statutes of Alberta, 1953.

The remuneration and expenses of members of the Board were paid by the Governments of Canada and the Province of Alberta in accordance with Section 2 (b) (iii) of the Memorandum of Agreement and are not, with the exception of honoraria of \$2,000.00 to A. T. Baker, included in the above statement.

Statement C

EASTERN ROCKIES FOREST CONSERVATION BOARD
STATEMENT OF GOVERNMENT OF CANADA AND GOVERNMENT
OF PROVINCE OF ALBERTA EQUITY
FOR THE YEAR ENDED MARCH 31, 1959

Balance as at April 1, 1958		\$ 5,874,973.80
Add:		
Increment of movable equipment, loose tools and small equipment, net	\$ 76,237.92	
Profit on sale of assets, net	4,234.02	
Workmen's Compensation Board deposit interest	<u>86.26</u>	<u>80,558.20</u>
		\$ 5,955,532.00
Deduct:		
Depreciation	\$ 60,293.44	
Workmen's Compensation Board interest remitted	<u>40.72</u>	<u>60,334.16</u>
Government of Canada and Government of Province of Alberta equity as at March 31, 1959		\$ <u>5,895,197.84</u>

Statement D

EASTERN ROCKIES FOREST CONSERVATION BOARD

SCHEDULE OF MOVABLE EQUIPMENT

AS AT MARCH 31. 1959

	<u>Cost</u>	<u>Provision for depreciation to March 31. 1959</u>		<u>Depreciated cost as at March 31, 1959</u>
		<u>Rate %</u>	<u>Amount</u>	
tractors and heavy equipment	\$ 253,356.05	20	\$ 217,131.26	\$ 36,224.79
ars and trucks	139,120.01	20	58,808.31	80,311.70
adio equipment	94,129.25	20	88,433.39	5,695.86
Equipment taken over from the Province of Alberta	16,349.84	--	--	16,349.84
ffice furniture and equipment	14,401.96	10	11,453.14	2,948.82
uildings, Columbia Ice Fields gauge house	586.80	10	586.80	--
iscellaneous, forestry, engineering and camp equipment	134,094.74	10	101,206.10	32,888.64
	<u>\$ 652,038.65</u>		<u>\$ 477,619.00</u>	<u>\$ 174,419.65</u>

* Note: Entered at depreciated cost as at April 1, 1948

[illegible]

SD 414 C2 E116 1958/1959
EASTERN ROCKIES FOREST
CONSERVATION BOARD

ANNUAL REPORT OF THE EASTERN
SERIAL MI 39721763 SCI



000038197687

SD
414
C2E116
1958/59

2299454

SCIENCE
CAMERON LIBRARY

B2